

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,015	12/21/2001	Joshua J. Malone	TI-29277	2355
23494	94 7590 12/28/2004		EXAMINER .	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			GEBREMARIAM, SAMUEL A	
			ART UNIT	PAPER NUMBER
			2811	
			DATE MAILED: 12/28/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS **AND INTERFERENCES**

Application Number: 10/028,015 Filing Date: December 21, 2001 Appellant(s): Malone et al.

MAILED
DEC 2 8 2004
GROUP 2800

Charles A. Brill For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/07/04.

Application/Control Number: 10/028,015

Art Unit: 2811

Page 2

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-9 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

Application/Control Number: 10/028,015 Page 3

Art Unit: 2811

(9) Prior Art of Record

5,153,379 Guzuk et al. 10-1992

6,037,698 Ueda et al. 03-2000

(10) Grounds of Rejection

a. Claims 1 and 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Guzuk et al. US patent No. 5,153,379.

Regarding claim 1, Guzuk teaches (fig. 1) a substrate for a device package comprising: a lower portion of a package (124); an intermediate metallization layer (130, 132 and 114, (114) is ground pad pattern) on a top surface of the lower portion (124); an upper portion (104) of the package on the top surface of the lower portion, a corner portion of the intermediate metallization (114) layer remaining visible beyond the extent of the upper portion (104) for indicating an orientation of said substrate.

Regarding claim 3, Guzuk teaches the entire claimed structure of claim 1 above including the lower portion comprising a layered ceramic (col. 2, lines 39-49) portion containing electrical interconnections (130 and 132).

Regarding claim 4, Guzuk teaches the entire claimed structure of claim 1 above including the visible corner portion comprising a plating (114) on the visible corner portion (col. 3, lines 35, 44).

Regarding claim 5, Guzuk teaches the entire claimed structure of claim 1 above including an electrical device (112) electrically connected to portions of the metallization layer (130 and 132).

Application/Control Number: 10/028,015

Art Unit: 2811

Regarding claim 6, Guzuk teaches the entire claimed structure of claim 1 above including an electrical device (112) electrically connected to portions of the metallization layer (130 and 132), the visible corner portion (114) electrically isolated from the portions of the metallization layer electrically connected to the device (114 is not directly contacting 130 and 32).

Regarding claim 7, Guzuk teaches the entire claimed structure of claim 1 above including an electrical device (112) and a lid (102) enclosing the device between the lid and the substrate (128).

Regarding claim 8, Guzuk teaches the entire claimed structure of claim 1 above including the upper portion (104) having a void over the visible corner region of the metallization layer (114), the void allowing visibility to the metallization layer (col. 3, lines 38-41).

b. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al. US patent No. 6,037,698.

Regarding claim 1, Ueda teaches (fig. 15) a substrate for a device package comprising: a lower portion of a package (5); an intermediate metallization layer (16) on a top surface of the lower portion (5); an upper portion (6) of the package on the top surface of the lower portion, a corner portion of the intermediate metallization (53) layer remaining visible beyond the extent of the upper portion (6) for indicating an orientation of the substrate.

Regarding claim 2, Ueda teaches the entire claimed structure of claim 1 above including the lower (5) and upper (6) portions comprising a ceramic (col. 7, lines 17-19).

c. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guzuk.

Regarding claim 9, Guzuk teaches substantially the entire claimed structure of claim 1 above except explicitly stating that the void is used to mechanically position the substrate.

Art Unit: 2811

The limitation, the void used to mechanically position the substrate is not given patentable weight because, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

(11) Response to Argument

Grounds of Rejection 1

- 8. Appellant's arguments filed 8/06/04 have been fully considered but they are not persuasive. Appellant argues that the reference by Guzuk does not show, teach, or suggest "a corner portion of said intermediate metallization layer remaining visible beyond the extent of said upper portion for indicating an orientation of said substrate". Applicant further argues since each corner of Guzuk's package looks identical, it fails to indicate the orientation of the package.
- 9. Guzuk teaches an intermediate metallization layer (130, 132 and 114 are ground pad patterns) on a top surface of the lower portion (124). Layer (114) remains visible after an upper portion (104) of the package is placed on the top surface of the lower portion. Therefore region (114) can be used to indicate the substrate orientation since the intermediate metallization (114) layer remains visible beyond the extent of the upper portion (104). Since layer (114) remains visible after the upper portion of the package (104) is placed on it, it can show whether the lower package portion is showing the wrong side up or not.

Art Unit: 2811

Furthermore applicant's argument that the metallization layer remaining visible beyond the extent of said upper portion for indicating an orientation of said substrate is not given patentable weight because, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Grounds of Rejection 2

Appellant argues since Ueda teaches an acoustic surface wave package in which the metallic cap is electrically connected to one of the ground terminal of the input terminal and the ground terminal of the output terminal, that it is clear from the figures (5A, 5B, 12, 14, and 19) that Ueda does not show, teach, or suggest an intermediate metallization layer on a top surface of said lower portion remaining visible beyond the extent of said upper portion for indicating an orientation of said substrate" as recited by Claim 1.

Layer (53) as shown in figure 15 taken to be the intermediate metallization layer is placed on the lower portion of the package (5) remaining visible beyond the extent of the upper portion of the package (6). Therefore layer (53) can be used to indicate the substrate orientation since the intermediate metallization (53) layer remains visible beyond the extent of the upper portion (6). Furthermore Ueda teaches the lower (5) and upper (6) portions comprising a ceramic (col. 7, lines 17-19) as recited in claim 2.

Application/Control Number: 10/028,015

with the additional limitations of Claim 9.

Art Unit: 2811

With regards to claim 9, appellant argues since claim 9 depends on Claim 1 should be deemed allowable for that reason and on its own merits. Appellant further states Guzuk does not show, teach or suggest the limitations of Claim 1, much less the limitations of claim combination

Page 7

Figure 1 of Guzuk structure shows chamfered section (voids) of the upper portion (104) that is placed above the metallization layer (114) where the void allows the visibility of the metallization layer (114). Therefore the void located on the upper portion (104) can be used to mechanically position the substrate so that the metallization layer (114) remains visible.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 2811

Respectfully submitted,

SAG

December 22, 2004

Conferees of Appeal Conference:

Eddie Lee

SPE, AU 2811

Brian Sircus SPE, AU 2836

SAG

Examiner 2811

Texas Instruments Incorporated P.O. Box 655474 M/S 399

Dallas, TX 75265

EDDIE LEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

BAIAN SIRCUS

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800